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1 59. An elongated bone implant for use in spinal fusions, said bone implant comprising a

- 2 section of bone that comprises a first side face and a second side face opposite said first
- 3 side face, an anterior end and a posterior end opposite said anterior end, a first side wall
- 4 and a second side wall opposite said first side wall, wherein said first side wall and said
- 5 second side wall extend between said first and second side faces, and wherein said
- 6 second side wall defines either a concave surface or both linear and concave surfaces.
- 1 60. The elongated bone implant of claim 59, wherein said first side wall defines a convex
- 2 surface.
- 1 61. The elongated bone implant of claim 59, wherein said elongated bone implant is
- 2 comprised of autograft, allograft, or xenograft cortical or cancellous bone.
- 1 62. The elongated bone implant of claim 59, wherein said anterior end has a dimension of
- 2 about 4 mm to about 5 mm coursing from said first side wall to second side wall.
- 1 63. The elongated bone implant of claim 59, wherein said posterior end has a dimension
- 2 of about 4 mm to about 6 mm coursing from said first side wall to second side wall.
- 1 64. The elongated bone implant of claim 59, wherein said concave surface has a
- 2 curvature relating to an angle of about 60 degrees to about 75 degrees.
- 1 65. The elongated bone implant of claim 59, wherein said first side face, second side
 - face, or both are machined to display a rough, ridged or grooved surface to aid in
- 3 preventing said bone implant from moving out of place.
- 1 66. The elongated bone implant of claim 65, wherein said first and second side faces are
- 2 machined to display ridges that are configured to prevent sliding of said bone implant
- 3 back toward the direction from which said bone implant is inserted.

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67. The elongated bone implant of claim 59, further comprising an instrument 1

attachment hole positioned at said posterior end, wherein said hole extends toward said

3 anterior end.

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- 1 68. The elongated bone implant of claim 59, wherein said bone implant is about 20 mm
- 2 to about 26 mm in length from said anterior end to said posterior end.
- 69. A method of fusing a first vertebra to a second vertebra comprising distracting said 1
- 2 first and second vertebrae; removing a portion of an intervertebral disc positioned
- 3 between said first and second vertebrae thereby creating a space, and implanting an
- elongated bone implant according to claim 1 into said space, wherein said elongated bone 4
- 5 implant is positioned such that said second side wall faces inwardly.

70. A method of fusing a first vertebra to a second vertebra in a patient comprising: distracting said first and second vertebrae;

removing a portion of an intervertebral disc positioned between said first and second vertebrae thereby creating a space; and

implanting an elongated bone implant into said space, said bone implant comprising a section of bone that comprises a first side face and a second side face opposite said first side face, an anterior end and a posterior end opposite said anterior end, a first side wall and a second side wall opposite said first side wall, wherein said first side wall and said second side wall extend between said first and second side faces, and wherein said second side wal defines either a concave surface or both linear and concave surfaces;

wherein said elongated bone implant is positioned in said space such that said second side wall faces inwardly.

71. The method of claim 70, wherein said elongated bone implant is positioned such that said anterior end is directed toward the anterior side of said patient and said posterior end is directed toward the posterior side of said patient.

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